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IBM CORPORATION 3039 CORNWALLIS RD. DEPT. T81 / B503, PO BOX 12195 REASEARCH TRIANGLE PARK, NC 27709			BULLOCK JR, LEWIS ALEXANDER	
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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/628,367
Filing Date: July 31, 2000
Appellant(s): BAILEY ET AL.

Robert A. Voigt, Jr. And Kelly K. Kordzik
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 4, 2006 appealing from the Office action mailed January 27, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

Claims 11-18 are allowed.

Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

This appeal involves claims 1-6, 9 and 10.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

Claims 1-6, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over CURTIS (U.S. Patent 5,896,531) in view of YOKOTE (U.S. Patent 6,105,074).

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner.

- The 101 rejections are withdrawn by the examiner.
- The 103 rejections regarding claims 7, 8 and 11-18 are withdrawn by the examiner.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,896,531	CURTIS et al	4-1999
6,105,074	YOKOTE	8-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 1-6, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over CURTIS (U.S. Patent 5,896,531) in view of YOKOTE (U.S. Patent 6,105,074).

As to claim 1, CURTIS teaches a method for progressively improving a fit of a pool of reusable environments to requirements of programs in a computer system, the method comprising steps of: providing a first environment (OME) for a first program (task) (col. 4, lines 38-56; col. 1, lines 55 – col. 2, line 2); responsive to initiation of a second program (task), making a determination whether creation of a new environment is a best response (via determining whether a reusable OME is available and whether it is compatible with the task) (col. 5, lines 46 – col. 6, line 6); responsive to a determination that creation of a new environment is a best response, creating a new environment for the second program (via determining that a reusable OME is not available or not compatible, starting a new OME) (col. 6, lines 30-42); and responsive to a determination that creating a new environment is not a best response, testing the pool for a best fit environment (via determining reusable environments are available and whether the environments support the task such that the task is linked to the environment) (col. 7, lines 33-56). However, CURTIS does not teach the step of adding elements to the best fit environment to match requirements of the second program, unless the best fit environment already matches the requirements of the second program.

YOKOTE teaches providing a best fit program environment and adding elements to the best fit environment to match requirements of the second program, unless the best fit environment already matches the requirements of the second program (via

incrementally sending executing environment objects to the execution environment to be added to the environment and thereby continue executing the downloaded application, i.e. task) (col. 7, lines 6-31). Curtis substantially discloses in his invention that if a reusable environment can be used to use the environment. The executing of the environment according to the teachings of Yokote allows the environment to expanded as the operations of the program are executed. Therefore, it would be obvious to one of ordinary skill in the art to combine the teachings of Curtis with the teachings of Yokote in order to construct the execution environments by the necessary expansion of execution environments without necessitating changes to the program (col. 9, lines 53-67).

As to claim 2, CURTIS teaches at least one of the first, new and best fit environments is an execution environment (OME) (col. 4, lines 44-56; col. 7, lines 33-56; col. 5, lines 46 – col. 6, line 6; col. 6, lines 30-42).

As to claim 3, CURTIS teaches the execution environment is preinitialized (col. 4, lines 38-43; col. 3, line 55-64; col. 4, lines 8-17).

As to claim 4, CURTIS teaches the at least one of the first, new, and best fit environments is eligible to be deleted (via discarding the OME at a later time thereby freeing up of the reusable OME storage and the deletion of the reference to the OME) (col. 6, lines 7-27; col. 8, lines 36-49).

As to claim 5, CURTIS teaches at least one least recently used of the first, new and best fit environments is eligible to be deleted (via determining that the OME cannot be reusable or cannot be changed to active and discarding the OME at a later time thereby freeing up of the reusable OME storage and the deletion of the reference to the OME) (col. 6, lines 7-27; col. 8, lines 36-49).

As to claim 6, YOKOTE teaches the elements are parameters of at least one of the first, the new, and the best fit environments (environment objects) (via incrementally sending executing environment objects to the execution environment to be added to the environment and thereby continue executing the downloaded application, i.e. task) (col. 1, line 66 – col. 2, line 21; col. 11, line 39 – col. 12, line 30; col. 17, lines 63-67; col. 18, line 1-4; col. 18, lines 15-45).

As to claims 9 and 10, reference is made to a program product on a signal medium that corresponds to the method of claim 1 and is therefore met by the rejection of claim 1 above.

(10) Response to Argument

First the examiner would like to set forth that some of the arguments make reference to the specification and that the interpretation put forth by the Examiner of the claims are not met based on the interpretation of the specification. Based on this

understanding, the examiner agrees that the cited combination of prior art does not teach the system means for claims, hence claims 11-18 as disclosed in the specification and the summary of the invention stated in brief and as proper under 35 U.S.C. 112 6th paragraph. The combination of references perform the steps in a different manner than disclosed in the specification and therefore claims 11-18 are allowable over the cited prior art of record. As proper under M.P.E.P. 2181, claims 11-18 meets the 3-prong analysis for interpreting and invoking 35 U.S.C. 112, sixth paragraph and therefore are interpreted in the manner disclosed in the specification. Claims 1-10 are not afforded the same latitude in interpretation because the cited claims fail the first part of the 3-prong analysis, e.g. the claim limitations must use the phrase "means for" or "step for". See *Watts v. XL Systems, Inc.*, 232 F.3d 877, 56 USPQ2d 1836 (Fed. Cir. 2000). See also *Masco Corp. v. United States*, 303 F.3d 1316, 1327, 64 USPQ2D 1182, 1189 (Fed. Cir. 2002); *O.I. Corp. v. Tekmar*, 115 F.3d 1576, 1583, 42 USPQ2d 1777, 1782 (Fed. Cir. 1997).

Appellants argue that the cited combination does not teach responsive to initiation of a second program, making a determination whether creation of a new environment is a best response. The examiner disagrees. Applicants agree that Curtis teaches determining whether or not the task can utilize a reusable OME, wherein if a reusable OME such that if a reusable OME is not available one is started (see page 8, 19-28 and figure 4 of Curtis). Curtis further states prior approaches allowed starting of the environments wherein each time an environment is started or invoked, some amount of initialization or instantiation is required of objects and their associated

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classes (col. 1, lines 16-39). Curtis improved upon the prior approach by maintaining some existing environments, however, if the environment was not compatible with the task, another environment would have to be started (col. 1, lines 40 - col. 2, line 5).

Appellants maintain that the determining whether a reusable OME can be used for a task is not the same as determining whether the creation of a new environment is the best response. Section (a) of 35 U.S.C. 103, details that a patent may not be obtained through the invention **is not identically disclosed or described** as set forth in section 102 of this title, **if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art** to which said subject matter pertains. Therefore, a determining step of whether a reusable object environment can be used and if not creating a new object environment would clearly be obvious to one of ordinary skill in the art as a way of determining whether creating an object environment is a best response. Although applicant's specification details what such determining would consist of and may be different from what one of ordinary skill in the art would consider such to be, the reading in of these limitations to interpret the "steps of" claims is improper under M.P.E.P. 2111 and 2181. It appears that this argument is based on how Applicant performs such in the specification and not at the level of one of ordinary skill in the art. Applicant then argues that a reusable OME is not a new environment. The examiner disagrees. The examiner will address this argument in the two ways of interpreting the term. When a new environment is interpreted based on the level of one of ordinary skill in the art, the

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environment as used in the claims is a structure capable of executing a program. Curtis teaches both the transitory and reusable environments are environments for executing a task (col. 4, lines 44-67; col. 6, lines 7-8; col. 6, lines 37-41; col. 6, lines 63-65).

Therefore, one of ordinary skill in the art would realize that an environment is a transitory or reusable environment. In regards to the how environment is used in the specification, page 10, lines 11-16 details that the environments are specialized open Task Control Blocks that are able to provide the enclave (or task runtime language environment) for instances of applications. Curtis teaches that the environments are for executing a task (application instance) (col. 4, lines 44-67; col. 6, lines 7-8; col. 6, lines 37-41; col. 6, lines 63-65), thereby obviously providing the enclave or task runtime language environment. Curtis also teaches that task are represented by an anchor block that provides the reference point to the whole OME (col. 4, lines 57-67).

Therefore, the OME of Curtis are specialized open Task Control Blocks (anchor blocks) also. Therefore, interpreting the limitation as one of ordinary skill in the art would or as disclosed in the specification, the limitation is met by the teachings as disclosed in the rejection.

Applicant then argues that the combination does not teach or suggest “responsive to a determination that creation of a new environment is a best response, creating a new environment for the program.” The examiner disagrees. As outlined above, the cited claim limitation is met. Curtis teaches determining whether or not the task can utilize a reusable OME, wherein if a reusable OME cannot be used, an environment is started (see page 8, 19-28 and figure 4 of Curtis). Starting the

environment would amount to creating the environment as outlined by Curtis prior approaches (col. 1, lines 16-39). Curtis improved upon the prior approach by maintaining some existing environments, however, if the environment were not compatible with the task, another environment would have to be started (col. 1, lines 40 - col. 2, line 5). Therefore, Curtis teaches responsive to a determination that creation of a new environment is a best response, creating a new environment for the program, via starting the environment. Appellants argue that starting a transitory OME is not the same as creating a new environment and neither is there any language in the cited passage that teaches starting a transitory OME. The examiner disagrees as outlined above. Further figure 4, and column 6, lines 30-42 detail starting an environment.

Appellant argues that the combination does not teach "responsive to a determination that creating a new environment is not a best response, testing the pool for a best fit environment." The examiner disagrees. Appellant further states that although Curtis teaches determining if a pool of unnamed reusable OMEs is empty or marked active, selecting a next reusable OME from the list of OMEs; and determining whether the task can utilize the selected OME; that this language does not test the pool for a best fit environment. The examiner disagrees. To properly respond to the arguments the examiner would like to incorporate the following paragraph made by Appellant. On page 10, line 24 – page 11, line 8, Appellant argues that the Examiner has not provided a basis in fact and/or technical reasoning to support the assertion that determining whether the pool of unnamed OMEs is empty is the same as testing the pool for a best fit environment **as defined in the specification**. This assertion is the

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primary difference the Examiner first made before responding to the arguments regarding the interpretation of claims 1 and 11. Regarding claim 11, the examiner is required to provide a basis in fact and/or technical reasoning that the step is the same as defined in the specification. Claim 1 has no basis for such an assertion. M.P.E.P. 2111 details that the claims are interpreted in their broadest reasonable interpretation consistent with the specification **without reading limitations of the specification into the claims**. Secondly, Applicant's specification details the testing involves other possible criteria that are evident to those skilled in the art (page 11, lines 14-17). Therefore, there is no limit to how one interprets the testing functionality. Curtis's use of testing each OME in the pool would constitute a testing of the pool for a best fit environment by one of skill in the art and therefore, the combination properly meets the claim limitations.

Appellants then argue that the combination does not teach the step of "adding elements to the best fit environment to match requirements of the second program, unless the best fit environment already matches the requirements of the second program." The examiner disagrees. Appellants state that a search of Yokote for "incrementally"; "environment object"; "executing environment objects" and "added" in Yokote did not reveal such usage and that the examiner's assertion that the limitation is met by Yokote by incrementally downloading environment objects to the executing environment cannot meet the limitation. The examiner first points to Appellants brief on page 17, lines 1-4 wherein Appellant states that Yokote teaches incremental downloading at column 8, lines 11-14. In addition, at column 7, lines 6-31, Yokote

teaches that constructing an execution environment is made by first downloading only the objects necessary for executing the application program from the objects comprising the execution environment by incrementally downloading. Therefore, Yokote teaches the step of adding elements to an environment to match requirements of a program unless the environment already matches the requirements of the program (via incrementally downloading environment objects as necessary to execute a program) (col. 7, lines 6-31).

In regards to claims 2-6 and 9-10, Appellant states that each reference is patentable over the combination for the same reasons that claim 1 are. Therefore, in response the Examiner disagrees and refers to the response regarding claim 1 above.

In regards to claim 5, Appellant argues that the combination does not teaches that at least one least recently used of the first, new, and best fit environments are eligible to be deleted. The examiner disagrees. The claim limitation, broadly interpreted as proper under M.P.E.P. 2111, details that either one of the least recently used environments is deleted. It does not require one to compare the environments to one another to determine which is the least recently used which may be Applicant's intent and thereby improperly incorporated as detailed in M.P.E.P. 2111. Curtis teaches the user consulting a pool of unnamed reusable OMEs to determine if an OME is available and compatible (col. 7, lines 33-67; figure 5B). If the OME is not compatible, the OME is deleted and another is created (figure 5B, element 470 and 472). Curtis inherently allows for the pool to contain only one OME due to the check perform if the pool is empty. Therefore, since the OME of the pool is deleted, the least recently used

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best fit environment (i.e. the only environment in the pool) is deleted. Therefore, the examiner believes that Curtis teaches a least recent used best fit environment is eligible to be deleted.

In regards to claim 6, Appellant argues that the combination does not teach “wherein the elements are parameters of at least one of the first, the new and the best fit environments.” The examiner disagrees. In addition, at column 7, lines 6-31 and column 9, lines 40-49, Yokote teaches that constructing an execution environment is made by first downloading only the execution objects necessary for initially executing the application program, if they do not already exist from the total objects wherein the execution environment is reconstructed by incrementally downloading the environment objects as needed. Therefore, Yokote teaches the step of adding elements to an environment to match requirements of a program unless the environment already matches the requirements of the program (via incrementally downloading environment objects as necessary to execute a program) (col. 7, lines 6-31). Parameters as defined by one of ordinary skill in the art are variables / values used to perform a function. Yokote teaches that a downloaded object can expand the object of the client as necessary to execute a new service (col. 9, line 40 – col. 10, line 13). Therefore, Yokote teaches the elements added, e.g. the environment objects, are parameters of at least one new, first, or best fit environment to perform a service.

Appellant then argues that the examiner’s motivation to combine Curtis with Yokote is insufficient to establish a prima facie case of obviousness in rejection the claims. The examiner disagrees. Appellant states that the Examiner’s motivation does

not provide reasons that the skilled artisan, when confronted with the same problems as the inventor and with no knowledge of the claimed invention, would modify Curtis to add elements to the best fit environment to match requirements of the second program unless the best fit environment already matches the requirements of the second program. In response the Examiner refers to *In re Linter*, 458 F.2d 1013,173 USPQ 560 (CCPA 1972); *In re Dillion*, 919 F 2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990); *Ex parte Levengood*, 28, USPQ2d 1300, 1302 (BD. Pat. App. & Inter. 1993), in stating that obviousness cannot be established by combining references "without also providing evidence of the motivating force which would impel one skilled in the art to do what the patent applicant has done", reading the quotation in context it is clear that while there must be motivation to make the claimed invention, **there is no requirement that the prior art provide the same reason as the applicant to make the claimed invention.** Therefore, the examiner's motivation does not have to provide reasons which are similar to Applicant, but reasons that the claimed teachings suggest the combination. Curtis teaches a scheme designed for reducing the time necessary to provide a data processing environment for a particular task (col. 1, lines 40-43) wherein an object manager provides the capability of traversing anchor blocks of OME to handle message routing, determinations whether a class needs to be loaded or whether an object needs to be initialized. Therefore, the object manager handles the starting of the OMEs and the initializing of its components. Yokote teaches the constructing of execution environments by the necessary expansion of execution environments without necessitating changes to the program (col. 9, lines 53-67). Hence, Yokote teaches

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expanding an existing execution environment by adding / downloading environment objects as necessary to create the new environment. Curtis substantially discloses in his invention that if a reusable environment can be used to use the environment and that the object manager initializes the components of the OME. The executing of the environment according to the teachings of Yokote allows the environment to be expanded as the operations of the program are executed. Therefore, it would be obvious to one of ordinary skill in the art to combine the teachings of Curtis with the teachings of Yokote in order to construct the execution environments by the necessary expansion of execution environments without necessitating changes to the program (col. 9, lines 53-67).

As to Appellants argument regarding claim 6, the examiner refers to the same rational provided above in refuting the arguments that there is no motivation to combine the references.

Therefore, the examiner believes that the rejection of claims 1-6, 9 and 10 should be sustained.

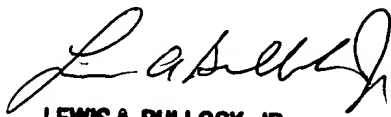
(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Lewis A. Bullock, Jr.



LEWIS A. BULLOCK, JR.
PRIMARY EXAMINER

Conferees:



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